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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/523,819

08/29/2005

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A8388

3998

23373 7590 12/09/2008  
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EXAMINER

SUTTON, ANDREW W

ART UNIT

PAPER NUMBER

3765

MAIL DATE

DELIVERY MODE

12/09/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |   |  |
|------------------------------|--------------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/523,819 | <b>Applicant(s)</b><br>SCHNEIDER, MARC S. |  |
|                              | <b>Examiner</b><br>ANDREW W. SUTTON  | <b>Art Unit</b><br>3765                   |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 8/29/05.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/4/05</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 5, 15, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The applicant claims the limitation of a slow recovery viscoelastic material, but the applicant fails to state to what degree. How slow is "slow?" Clarification is needed.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 5, 7, 8, 10, 13-15, 17-20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strohm (2,785,404) in view of Dennis (US 2002/0002730). Strohm teaches a helmet shell 10 with energy absorbing pads/liner 18, 19, and 23 with a surface impregnation of waterproofing material 27 and with the surface facing the interior surface of the helmet shell lacking the waterproofing material 27. Strohm does not teach the liner comprising a slow recovery viscoelastic material. Dennis teaches an energy absorbing protective liner 16 of a slow recovery viscoelastic

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material (par. 24). It would have been obvious to one of ordinary skill in the art to modify the pads of Strohm with that of Dennis to provide better shock abortion.

As to claims 2, 5, 15, 20, Dennis teaches that the viscoelastic material responds to higher rate of acceleration impacts with a slow response.

As to claims 7 and 22, Strohm illustrates the pads being of various thickness and size.

As to claims 8 and 9, Strohm teaches the plastic shell 10 which would meet the limitation of thermoplastic.

As to claim 10, In assessing the subject matter of product-by-process claims, it is necessary to bear in mind certain principles. Foremost among these is the principle that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. In re Thorpe, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985); In re Brown, 459 F. 2d 531, 173 USPQ 685 (CCPA 1972); In re Pilkington, 411 F.2d 1345, 162 USPQ 145 (CCPA 1969). Thus, the patentability of a product does not depend on the method of production. Thorpe, supra. If the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. Thorpe, supra; In re Marosi, 710 F.2d 799, 218 USPQ 289 (Fed. Cir. 1983). The Court of Customs and Patent Appeals discussed these principles as well as the rationale for rejection of such claims over prior art disclosures of products in In re Brown, 459 F.2d 531, 173 USPQ 685 (CCPA 1972) as follows:

In order to be patentable, a product must be novel, useful and unobvious. In our law, this is true whether the product is claimed by describing it, or by listing

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the process steps used to obtain it. This latter type of claim, usually called a product-by-process claim, does not inherently conflict with the second paragraph of 35 USC 112. [citation omitted] That method of claiming is therefore a perfectly acceptable one so long as the claims particularly point out and distinctly claim the product or genus of products for which protection is sought and satisfy the other requirements of the statute. It must be admitted, however, that the lack of physical description in a product-by-process claim makes determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, it is the patentability of the product claimed and not of the recited process steps which must be established. We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claimed in a product-by-process claim, a rejection based alternatively on either section 102 or section 103 of the statute is eminently fair and acceptable. As a practical matter, the Patent Office is not equipped to manufacture products by the myriad of processes put before it and then obtain prior art products and make physical comparisons therewith. (emphasis in the original, footnotes omitted).

Thus, although process limitations distinguishing the product over the prior art must be given the same consideration as traditional product characteristics, In re Hallman, 655 F.2d 212, 210 USPQ 609 (CCPA 1981), In re Luck, 476 F.2d 650, 177 USPQ 523 (CCPA 1973), and although product-by-process claims are limited by and defined by the process, determination of patentability remains based upon the product itself, Thorpe, 227 USPQ at 966.

In view of the similarities between the claimed process, i.e. "injection molded" and that of the prior art of Strohm, it is reasonable to believe that the product made by the prior art process would be either identical to or only slightly different from the claimed product. In such a situation, the burden of proof shifts to applicant to prove that the claimed product is materially different.

As to claim 13, it is inherent that the pads of Strohm disperse the forces to other portions of the shell due to being bound by the shell 10.

As to claim 14, with respect to the exact percentage of the impact force dispersed by the shell would have been obvious to one of ordinary skill in the art at the

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time of the invention since all would be required is that the percentage attainable with the particular helmet structure.

As to claim 17, Strohm illustrates the upper lateral member 10 and lower lateral member 27 that are separated by channel 13.

Claims 3, 6, 16, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strohm (2,785,404) in view of Dennis (US 2002/0002730) in further view of Faye (6,025,067). Strohm does not teach the waterproofing material 27 being made of silicone. Fay teaches the use of silicon (see col. 5 lines 53-61) to waterproof helmet liners (see col. 8 line 12). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to substitute the silicone of Fay for the material of 27 of Strohm to achieve the like result of waterproofing the energy absorbing material.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Strohm (2,785,404) in view of Dennis (US 2002/0002730) in view of Dera (US 4,101,983). Strohm does not teach the helmet shell having a thickness of at least 2 mm. Dera teaches the helmet shell with a thickness of 2.5-4.5 mm. It would have been obvious to one of ordinary skill in the art to modify the helmet of Strohm by providing the shell with a thickness of 2.5-4.5 mm in the manner of Dera to provide a suitable thickness for protection.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Strohm (2,785,404) in view of Dennis (US 2002/0002730) in view of Johnson (US 3,946,441). Strohm does not teach glass fiber for the plastic shell. Johnson teaches the use of

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glass fibers in forming the shell (see col. 1 lines 17-24). It would have been obvious to one of ordinary skill in the art to modify the helmet of Strohm with the glass fibers of Johnson to achieve a more protective shell.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Strohm (2,785,404) in view of Dennis (US 2002/0002730) in view of Schneider (US 3,462,763). Strohm does not teach the lateral members being thicker than other portions of the helmet shell. Schneider teaches the lateral members defined by 22 thicker than the other portions of the shell. It would have been obvious to one of ordinary skill in the art to modify the shell of Strohm with the thickness of Schneider to provide enhancing protection to lateral forces.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW W. SUTTON whose telephone number is (571)272-6093. The examiner can normally be reached on Monday - Thursday 8:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary L. Welch can be reached on (571) 272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AWS

5 December 2008

/Shaun R Hurley/

Primary Examiner, Art Unit 3765